

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

Claim 1. (cancelled)

Claim 2. (cancelled)

Claim 3. (currently amended) A sulfonamide derivative or a salt thereof according to claim 1, wherein A is a (C<sub>4</sub>-C<sub>6</sub>)alkylene group or a substituted (C<sub>4</sub>-C<sub>6</sub>)alkylene group having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, any carbon atom in the (C<sub>4</sub>-C<sub>6</sub>)alkylene group or substituted (C<sub>4</sub>-C<sub>6</sub>)alkylene group may be substituted by a (C<sub>2</sub>-C<sub>5</sub>)alkylene group so as to form a (C<sub>3</sub>-C<sub>6</sub>)cycloalkane ring, and any two carbon atoms in the (C<sub>2</sub>-C<sub>6</sub>)alkylene group or substituted (C<sub>2</sub>-C<sub>6</sub>)alkylene group may be taken together with an alkylene group so as to represent a (C<sub>3</sub>-C<sub>6</sub>)cycloalkane ring;

R<sup>1</sup> is a hydrogen atom; a (C<sub>4</sub>-C<sub>6</sub>)alkyl group; a substituted (C<sub>4</sub>-C<sub>6</sub>)alkyl group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, hydroxyl group, (C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, mono(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups, mono(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino groups, di(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups whose (C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different, di(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino groups whose halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups

~~may be the same or different, (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkylaminocarbonyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkylcarbonyloxy groups, phenoxy group, substituted phenoxy groups having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>4</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups and (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonyl groups, phenylthio group, substituted phenylthio groups having one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>4</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups and (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonyl groups, phenyl group, substituted phenyl groups having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C<sub>4</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, mono(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups, di(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups whose (C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different, (C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups and (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonyl groups, pyridyl group, and substituted pyridyl groups having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C<sub>4</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, mono(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups, di(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups whose (C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different, (C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups,~~

~~(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups and (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonyl groups; a (C<sub>3</sub>-C<sub>6</sub>)alkenyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)alkenyl group; a (C<sub>3</sub>-C<sub>6</sub>)alkynyl group; a halo(C<sub>3</sub>-C<sub>6</sub>)alkynyl group; a (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl group; a hydroxyl group; a (C<sub>4</sub>-C<sub>6</sub>)alkoxy group; a halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy group; an amino group; a mono(C<sub>4</sub>-C<sub>6</sub>)alkylamino group; a mono(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino group; a di(C<sub>4</sub>-C<sub>6</sub>)alkylamino group whose (C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different; a di(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino group whose halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different; a (C<sub>4</sub>-C<sub>6</sub>)alkylcarbonylamino group; a phenylamino group; a substituted phenylamino group having on the ring one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C<sub>4</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, mono(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups, mono(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino groups, di(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups whose (C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different, di(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino groups whose halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different, (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonyl groups and (C<sub>4</sub>-C<sub>6</sub>)alkylaminocarbonyl groups; a benzoylamino group; a substituted benzoylamino group having on the ring one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C<sub>4</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, mono(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups, mono(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino groups, di(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups whose (C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different, di(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino groups whose halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or~~

different, (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonyl groups and (C<sub>4</sub>-C<sub>6</sub>)alkyl aminocarbonyl groups; a phenyl group; a substituted phenyl group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C<sub>4</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, mono(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups, mono(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino groups, di(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups whose (C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different, di(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino groups whose halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different, (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonyl groups and (C<sub>4</sub>-C<sub>6</sub>)alkylaminocarbonyl groups; a pyridyl group; or a substituted pyridyl group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C<sub>4</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl groups, mono(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups, mono(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino groups, di(C<sub>4</sub>-C<sub>6</sub>)alkylamino groups whose (C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different, di(halo(C<sub>4</sub>-C<sub>6</sub>)alkyl)amino groups whose halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups may be the same or different, and (C<sub>4</sub>-C<sub>6</sub>)alkoxycarbonyl groups;

each of R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup>, which may be the same or different, is a hydrogen atom, a (C<sub>4</sub>-C<sub>6</sub>)alkyl group, a (C<sub>3</sub>-C<sub>6</sub>)alkenyl group, a (C<sub>3</sub>-C<sub>6</sub>)alkynyl group, a (C<sub>4</sub>-C<sub>4</sub>)alkoxy(C<sub>4</sub>-C<sub>4</sub>)alkyl group or a (C<sub>4</sub>-C<sub>4</sub>)alkylthio(C<sub>4</sub>-C<sub>4</sub>)alkyl group, R<sup>2</sup> being able to bind to A or R<sup>1</sup> to form a 3 to 8 membered ring which may contain one to three atoms that may be the same or different and are selected from oxygen atom, sulfur atom and

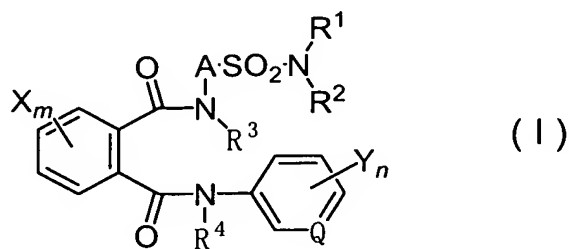
nitrogen atom, and which ring may have one or more substituents that may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups and (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups;

Q is a carbon atom or a nitrogen atom;

each of X<sub>s</sub>, which may be the same or different, is a halogen atom, a nitro group, a (C<sub>1</sub>-C<sub>6</sub>)alkyl group, a halo(C<sub>1</sub>-C<sub>6</sub>)alkyl group, a (C<sub>2</sub>-C<sub>6</sub>)alkenyl group, a halo(C<sub>2</sub>-C<sub>6</sub>)alkenyl group, a (C<sub>2</sub>-C<sub>6</sub>)alkynyl group, a halo(C<sub>3</sub>-C<sub>6</sub>)alkynyl group, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy group, a halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy group, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyloxy group, a halo(C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyloxy group, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio group, a halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio group, a (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl group, a halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl group, a (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl group, a halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl group, a (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyloxy group or a halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyloxy group, two adjacent X<sub>s</sub> on the aromatic ring being able to be taken together to represent a fused ring that may have one or more substituents which may be the same or different and are selected from halogen atoms, nitro group, cyano group, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups and halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl groups, m is an integer of 0 to 2;

—— each of Y<sub>s</sub>, which may be the same or different, is a halogen atom; a (C<sub>1</sub>-C<sub>6</sub>)alkyl group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkyl group; a hydroxyhalo(C<sub>1</sub>-C<sub>6</sub>)alkyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkoxyhalo(C<sub>1</sub>-C<sub>6</sub>)alkyl group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkoxyhalo(C<sub>1</sub>-C<sub>6</sub>)alkyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkoxy group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkoxy group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkoxyhalo(C<sub>1</sub>-C<sub>6</sub>)alkoxy group; a (C<sub>1</sub>-C<sub>6</sub>)alkylthio group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkylthio group; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl group; a halo(C<sub>1</sub>-C<sub>6</sub>)alkoxyhalo(C<sub>1</sub>-

~~C<sub>6</sub>)alkylthio-group; a halo(C<sub>4</sub>-C<sub>6</sub>)alkoxyhalo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl-group; a halo(C<sub>4</sub>-C<sub>6</sub>)alkoxyhalo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl-group; a phenoxy-group; a substituted phenoxy-group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano-group, nitro-group, (C<sub>4</sub>-C<sub>6</sub>)alkyl-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl-groups and halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl-groups; a phenylthio-group; a substituted phenylthio-group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano-group, nitro-group, (C<sub>4</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl-groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl-groups and halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl-groups; a pyridyloxy-group; or a substituted pyridyloxy-group having one or more substituents which may be the same or different and are selected from halogen atoms, cyano-group, nitro-group, (C<sub>4</sub>-C<sub>6</sub>)alkyl-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl-groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl-groups and halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl-groups, two adjacent Ys on the aromatic ring being able to be taken together to represent a fused ring that may have one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>4</sub>-C<sub>6</sub>)alkyl groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkyl-groups, (C<sub>4</sub>-C<sub>6</sub>)alkoxy-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkoxy-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylthio-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylthio-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl-groups, halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfinyl-groups, (C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl-groups and halo(C<sub>4</sub>-C<sub>6</sub>)alkylsulfonyl-groups, and n is an integer of 0 to 3 represented by general formula (I) or a salt thereof:~~



wherein A is a (C<sub>1</sub>-C<sub>6</sub>)alkylene group;

R<sup>1</sup> is a hydrogen atom; a (C<sub>1</sub>-C<sub>6</sub>) alkyl group; a substituted (C<sub>1</sub>-C<sub>6</sub>)alkyl group having one or more substituents which may be the same or different and are selected from halogen atoms, hydroxyl group, (C<sub>1</sub>-C<sub>6</sub>) alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>) alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>) alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>) alkylsulfonyl groups, (C<sub>1</sub>-C<sub>6</sub>) alkylaminocarbonyl groups, (C<sub>1</sub>-C<sub>6</sub>) alkylcarbonyloxy groups, phenylthio group, phenyl group, substituted phenyl groups having one or more substituents which may be the same or different and are selected from halogen atoms, cyano group, nitro group, (C<sub>1</sub>-C<sub>6</sub>)alkyl groups, (C<sub>1</sub>-C<sub>6</sub>) alkoxy groups, halo (C<sub>1</sub>-C<sub>6</sub>) alkylthio groups, and pyridyl group; a (C<sub>3</sub>-C<sub>6</sub>) alkenyl group; a (C<sub>3</sub>-C<sub>6</sub>) alkynyl group; a (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl group; a hydroxyl group; a (C<sub>1</sub>-C<sub>6</sub>)alkoxy group; an amino group; a phenylamino group; a substituted phenylamino group having on the ring one or more substituents which may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>)alkoxy groups and (C<sub>1</sub>-C<sub>6</sub>)alkylthio groups; or a pyridyl group;

each of R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup>, which may be the same or different, is a hydrogen atom, a (C<sub>1</sub>-C<sub>6</sub>)alkyl group, a (C<sub>3</sub>-C<sub>6</sub>) alkenyl group, a (C<sub>3</sub>-C<sub>6</sub>) alkynyl group, a (C<sub>1</sub>-C<sub>4</sub>) alkoxy(C<sub>1</sub>-C<sub>4</sub>)alkyl group or a (C<sub>1</sub>-C<sub>4</sub>) alkylthio(C<sub>1</sub>-C<sub>4</sub>)alkyl group, R<sup>2</sup> being able to bind to A or R<sup>1</sup> to form a 3- to 8-membered ring which may

contain one to three atoms that may be the same or different and are selected from oxygen atom, sulfur atom and nitrogen atom, and which ring may have one or more substituents that may be the same or different and are selected from halogen atoms, (C<sub>1</sub>-C<sub>6</sub>) alkyl groups and (C<sub>1</sub>-C<sub>6</sub>) alkoxy groups;

Q is a carbon atom or a nitrogen atom;

each of Xs, which may be the same or different, is a halogen atom, a nitro group, a (C<sub>1</sub>-C<sub>6</sub>)alkyl group, a halo (C<sub>1</sub>-C<sub>6</sub>) alkyl group, a (C<sub>2</sub>-C<sub>6</sub>) alkenyl group, a halo (C<sub>2</sub>-C<sub>6</sub>) alkenyl group, a (C<sub>2</sub>-C<sub>6</sub>) alkynyl group, a halo (C<sub>3</sub>-C<sub>6</sub>) alkynyl group, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy group, a halo (C<sub>1</sub>-C<sub>6</sub>) alkoxy group, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyloxy group, a halo(C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyloxy group, a (C<sub>1</sub>-C<sub>6</sub>) alkylthio group, a halo (C<sub>1</sub>-C<sub>6</sub>) alkylthio group, a (C<sub>1</sub>-C<sub>6</sub>) alkylsulfinyl group, a halo (C<sub>1</sub>-C<sub>6</sub>) alkylsulfinyl group, a (C<sub>1</sub>-C<sub>6</sub>) alkylsulfonyl group, a halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyl group, a (C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyloxy group or a halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfonyloxy group, two adjacent Xs on the aromatic ring being able to be taken together to represent a fused ring that may have one or more substituents which may be the same or different and are selected from halogen atoms, nitro group, cyano group, (C<sub>1</sub>-C<sub>6</sub>) alkyl groups, halo (C<sub>1</sub>-C<sub>6</sub>) alkyl groups, (C<sub>1</sub>-C<sub>6</sub>) alkoxy groups, halo (C<sub>1</sub>-C<sub>6</sub>) alkoxy groups, (C<sub>1</sub>-C<sub>6</sub>) alkylthio groups, halo (C<sub>1</sub>-C<sub>6</sub>) alkylthio groups, (C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, halo(C<sub>1</sub>-C<sub>6</sub>)alkylsulfinyl groups, (C<sub>1</sub>-C<sub>6</sub>) alkylsulfonyl groups and halo (C<sub>1</sub>-C<sub>6</sub>) alkylsulfonyl groups, m is an integer of 0 to 1;

each of Ys, which may be the same or different, is a halogen atom; a (C<sub>1</sub>-C<sub>6</sub>)alkyl group; a halo (C<sub>1</sub>-C<sub>6</sub>) alkyl group; or a halo (C<sub>1</sub>-C<sub>6</sub>) alkoxy group; and n is an integer of 1 to 3.



Claim 4. (currently amended) An agricultural and horticultural insecticide characterized by containing a sulfonamide derivative of general formula (I) or a salt thereof according to ~~claims 1 to 3~~ claim 3 as an active ingredient.

Claim 5. (original) A method for applying an agricultural and horticultural insecticide, characterized by treating a crop plant to be protected, soil or a paddy field with an effective amount of an agricultural and horticultural insecticide according to claim 4 in order to protect useful plants against insect pests.